



APPENDIX A - SPECIFICATION/CLAIM AMENDMENTS  
INCLUDING NOTATIONS TO INDICATE CHANGES MADE

Serial No.: 09/388,286

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Amendments to the following are indicated by underlining what has been added and bracketing what has been deleted. Additionally, all amendments are in bold text.

**In the Claims**

For convenience, all of pending claims 1, 3, 6-21, and 28 are shown below.

1. A method of detecting a gas phase material comprising:  
providing a sensor comprising first and second electrodes, a detection surface extending between the first electrode and the second electrode, and a detector operatively connected to the first and second electrodes;  
exposing the detection surface to a gas phase material comprising ruthenium, wherein an electrically conductive film of gas phase material forms on the detection surface between the first and second electrodes;  
detecting the gas phase material from a change in conductivity between the first and second electrodes with the detector; and  
generating an alert based on the detection of the gas phase material;  
wherein the detection surface is selected such that the gas phase material preferentially deposits on the detection surface.
3. A method according to claim 1, wherein the gas phase material comprises ruthenium tetraoxide.
6. A method of detecting a gas phase material comprising:  
providing a sensor comprising first and second electrodes, a detection surface extending

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between the first electrode and the second electrode, and a detector operatively connected to the first and second electrodes, wherein the detection surface is not electrically conductive;

exposing the sensor to a gas phase material comprising ruthenium, wherein an electrically conductive film of the gas phase material forms on the detection surface between the first and second electrodes;

detecting electrical conductivity of the electrically conductive film between the first and second electrodes with the detector; and

generating an alert based on the detection of the electrical conductivity of the electrically conductive film;

wherein the detection surface is selected such that the gas phase material preferentially deposits on the detection surface.

7. A method according to claim 6, wherein the detection surface comprises a polymer.
8. A method according to claim 6, wherein the detection surface comprises polypropylene.
9. A method according to claim 6, wherein the detection surface comprises glass.
10. A method of detecting a gas phase material comprising:
  - providing a sensor comprising first and second electrodes, a detection surface extending between the first electrode and the second electrode, and a detector operatively connected to the first and second electrodes;
  - heating the detection surface above ambient temperature;
  - exposing the detection surface to a gas phase material comprising ruthenium, wherein an electrically conductive film comprising ruthenium forms on the detection surface between the first and second electrodes;
  - detecting the gas phase material from a change in conductivity between the first and second electrodes with the detector; and

generating an alert based on the detection of the gas phase material;

wherein the detection surface is selected such that the gas phase material comprising ruthenium preferentially deposits on the detection surface.

11.(Amended) A method according to claim 10, wherein **[the gas phase material comprises ruthenium, and further wherein]** heating the detection surface comprises heating the detection surface up to about 100°C or less.

12. A sensor for detecting a gas phase material comprising ruthenium in an environment, the detector comprising:

first and second electrodes;

a detection surface extending between the first electrode and the second electrode, wherein the detection surface comprises a material on which the gas phase material comprising ruthenium preferentially deposits; and

a detector measuring electrical conductivity between [operatively connected to] the first and second electrodes, where the detector generates an alert when an electrically conductive film comprising ruthenium forms on the detection surface between the first and second electrodes.

13. A sensor according to claim 12, wherein the detection surface comprises a polymer.

14. A sensor according to claim 12, wherein the detection surface comprises polypropylene.

15. A sensor according to claim 12, wherein the detection surface comprises glass.

16. A sensor according to claim 12, wherein the detector comprises an electronic circuit capable of detecting a change in electrical conductivity between the first and second electrodes.

17. A sensor for detecting a gas phase material comprising ruthenium in an environment, the detector comprising:

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first and second electrodes;

a detection surface extending between the first electrode and the second electrode, wherein the detection surface comprises a material on which the gas phase material comprising ruthenium preferentially deposits;

a heater capable of providing thermal energy to the detection surface; and

a detector measuring electrical conductivity between [operatively connected to] the first and second electrodes, where the detector generates an alert when an electrically conductive film comprising ruthenium forms on the detection surface between the first and second electrodes.

18. A sensor according to claim 17, wherein the detection surface comprises a polymer.

19. A sensor according to claim 17, wherein the detection surface comprises glass.

20. A sensor according to claim 12, wherein the detector comprises an electronic circuit capable of detecting a change in electrical conductivity between the first and second electrodes.

21. A method according to claim 1, wherein selection of the detection surface comprises selecting a detection surface comprising polypropylene.

28. A method according to claim 10, wherein selection of the detection surface comprises selecting a detection surface comprising polypropylene.